

- b) applying the joining compound to opposing surfaces of the objects to be joined together;
- c) heating the joint to a heating temperature below the melting point of a lowest melting point constituent of the construct; and
- d) applying pressure to the objects so as to direct the opposing surfaces toward each other, whereby the joint compound is intermediate the opposing surfaces wherein superplastic deformation occurs between the objects and the joint compound.

8. (Previously Amended) The method as recited in claim 7 wherein the heating temperature is 0.5 to 0.7 the melting temperature of the lowest melting point constituent of the construct.

9. (Previously Amended) The method as recited in claim 7 wherein the applied pressure and heating temperature are applied at an inverse relationship to each other.

10. (Previously Amended) The method as recited in claim 7 wherein the solid objects are comprised of multiphase materials selected from the group consisting of ceramics, glass ceramics, intermetallic compounds, metals, and combinations thereof.

11. (Previously Amended) The method as recited in claim 7 wherein the solid objects are two-phase bodies and wherein the volume percent of one phase to the other phase varies from 2 to 98.

12. (Original) The method as recited in claim 7 wherein the objects are two-phase bodies and wherein the volume percent of one phase to the other phase varies from 2 to 98.

13. (Original) The method as recited in claim 7 wherein the joint compound is applied to a thickness that is at least five times the dimension of the largest particles contained in the joint compound.

14-24. (Canceled)

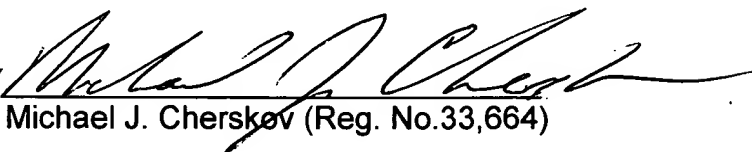
25. (Previously added) The method as recited in claim 7 wherein the construct is heated to approximately 50-60 percent of the melting temperature of the lowest melting temperature constituent.

26. (Previously added) The method as recited in claim 7 wherein a constituent of the joint compound or the objects comprise 65 percent or more by volume of a phase that exhibits superplastic flow at the heating temperature.

Respectfully Submitted,

CHERSKOV & FLAYNIK

BY


Michael J. Cherskov (Reg. No.33,664)